

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 6 and 7 have been amended. Claims 1-3 and 5-7 are pending and under consideration.

GROUND FOR ENTRY OF THIS RESPONSE PURSUANT TO 37 CFR 1.116

The Applicants respectfully request entry of this Rule 116 Response because it is believed that the amendments and arguments put forward place these claims in condition for allowance. These amendments and arguments were not earlier presented because the Applicants believed in good faith that the claims as recited in their previous form were allowable over the previously cited prior art and complied with 35 USC 112. The claims as amended address and resolve the 112 rejection.

CLAIM REJECTIONS – 112

Claim 7 was rejected under 35 USC 112, second paragraph, as being indefinite. Specifically, the Examiner stated that the orientation of the lubricant reservoir bottom groove was unclear. Appropriate correction has been made to claim 7 to clarify that the lubricant reservoir bottom groove is formed in between each opposing pocket surface portion in the ball retainer and intersects the ball bearing surfaces and the non-contact surface area. Support for this amendment may be found in at least the paragraph beginning on page 9, line 9 of the specification and Figures 1 and 5.

Withdrawal of the foregoing rejection is requested.

CLAIM REJECTIONS – 102 and 103

Claims 1 and 5 were rejected under 35 USC 102(b) as being anticipated by Mutoh et al. (US 6,068,408) (hereinafter "Mutoh '408").

Claims 2, 6 and 7 were rejected under 35 USC 103(a) as being unpatentable over Mutoh '408 in view of Mutoh et al. (US 6,074,099) (hereinafter "Mutoh '099").

Claim 3 was rejected under 35 USC 103(a) as being unpatentable over Mutoh '408 in view of Yamamoto et al. (US 2003/0012461) (hereinafter "Yamamoto").

Claims 1-5

Amended claim 1 recites: "...wherein the portion of the retainer body adjacent each pocket is formed as a thick walled portion of a thickness greater than the radial thickness of the retainer body not adjacent each pocket." Support for this amendment may be found in at least the paragraph beginning on page 9, line 26 of the specification and Figures 1, 2 and 4. In its present form, it is respectfully submitted that claim 1 distinguishes over Mutoh '408, which was relied on to show this feature of claim 1.

In the Office Action, the Examiner refers to Figure 11 of Mutoh '408. However, Figure 11 of Mutoh '408 shows that the main portion 7 of the cage 28a has the same radial thickness of the pocket 8. In the Office Action, the pair of elastic pieces 12 disposed on the main portion 7 is used to show the feature of claim 1 where the portion of the retainer body adjacent each pocket is formed as a thick walled portion of a thickness greater than the radial thickness of the retainer body not adjacent each pocket. However, the elastic pieces 12 are not a part of the main portion 7.

This technical feature of claim 1 makes it possible to effectively suppress rubbing sounds which would be generated as a result of contact between the retainer and an inner peripheral surface of an outer race and/or an outer peripheral surface of an inner race, particularly in the case of application to a bearing having a large diameter and a small wall thickness. When the retainer body of claim 1 has a relatively small wall thickness, a lubricant such as grease can be retained in a gap between the retainer and the inner peripheral surface of the outer race and/or the outer peripheral surface of the inner race for the smooth introduction of such lubricant into the pocket. Because of this, not only can lubrication at those areas of sliding contact be maintained advantageously in a favorable condition, but any undesirable generation of vibrations and noises from those areas of contact can also be further suppressed efficiently.

Claims 2, 3 and 5 are dependent on claim 1 and are therefore believed to be allowable for at least the foregoing reason.

Withdrawal of the foregoing rejection is requested.

Claim 6

Amended claim 6 recites: "...wherein the portion of the retainer body adjacent each pocket is formed as a thick walled portion of a thickness greater than the radial thickness of the retainer body not adjacent each pocket." Support for this amendment may be found in at least the paragraph beginning on page 9, line 26 of the specification and Figures 1, 2 and 4. It is respectfully submitted that neither Mutoh '408 nor Mutoh '099 discusses this feature of claim 6.

Withdrawal of the foregoing rejection is requested.

Claim 7

Amended claim 7 recites: "...a radially disposed intersecting lubricant reservoir bottom groove formed in between each opposing pocket surface portion in the ball retainer, intersecting the ball bearing surfaces and the non-contact surface area...." As previously discussed, support for this amendment may be found in at least the paragraph beginning on page 9, line 9, of the present application and in Figures 1 and 5 of the present application. In its present form, it is respectfully submitted that claim 7 patentable distinguishes over the grooves shown in Figure 11 of Mutoh '099. Figure 11 of Mutoh '099 shows where the spherical surface portion 15 is divided by two grooves 20 into three surface portions. By contrast, claim 7 recites a single groove formed in between each opposing pocket surface portion. It is noted that in addition to the orientation of the bottom groove being shown in the drawings, the amended form of claim 7 clarifies the groove extends from one side of the pocket to the other and therefore distinguishes over the grooves 20 shown in Mutoh '099. Further, the primary reference Mutoh '408 does not disclose this feature of claim 7 as Mutoh '408 does not show or discuss lubricating grooves at all.

Withdrawal of the foregoing rejection is requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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